We Claim:

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1) A die attach adhesive comprising

- (a) 5 to 30 weight percent of a mixture of a vinyl ether compound containing polar functionality and an electron acceptor compound,
- (b) 0.01 to 10.0 weight percent of a free-radical initiator or photoinitiator,
 - (c) 70 to 95 weight percent of a conductive or nonconductive filler, to a total of 100 weight percent,
- in which the vinyl ether has the structure

$$\begin{bmatrix} R^3 & O \\ R^1 & O \\ R^2 & O \end{bmatrix}_{n}^{2}$$

in which

n is 1 to 6;

R¹, R², and R³ are hydrogen methyl or ethyl;

Q is an alkyl or cyckoalkyl linear or branched chain having 1 to 12 carbon atoms; an alkylenoxy chain having 1 to 12 carbon atoms, or aromatic or fused aromatic ring having 3 to 10 carbon atoms and optionally containing the heteroatoms O, N or S;

X and Y are independently O, NR¹, or S, with the proviso that both X and Y cannot be oxygen or sulfur;

Z is a branched or linear alkane, which may contain cyclic moieties, a siloxane, a polysiloxane, a C₁ to C₄ alkoxy-terminated siloxane or polysiloxane, a polyether, a polyester, a polyurethane, a poly(butadiene), or an aromatic, polyaromatic, or heteroaromatic group.

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The die attach adhesive according to claim 1 in which R¹, R², and R³ are hydrogen,

Q is a linear or branched chain alkyl having 1 to 12 carbon atoms;

and

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Z is a linear or branched chain alkyl having up to 36 carbon atoms.

- 3. The die attach adhesive according to claim 1 in which the filler is a conductive filler.
- 10 4. The die attach achesive according to claim 3 in which the filler is silver.
 - 5. The die attach adhesive according to claim 1 in which the filler is tetrafluoroethylene.

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A vinyl ether compound having the structure:

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in which

R¹, R², and R³ are independently hydrogen, a methyl group, or an ethyl group;

Q is an alkyl or alkylenoxy linear or branched chain having 1 to 12 carbon atoms;

Z is a branched or linear alkane, which may contain cyclic moieties, a siloxane, a polysiloxane, a C₁ to C₄ alkoxy terminated siloxane or

polysiloxane, a polyether, a polyester, a polyurethane, a poly(butadiene), or an aromatic, polyaromatic, or heteroaromatic group.

7. The vinyl ether compound according to claim 5 having the structure

in which C₃₆ is a mixture of isomers of a 36 carbon linear or branched chain.

8. An adhesive composition containing the vinyl ether compound according to claim 5, a free radical initiator or photoinitiator, and optionally a conductive or nonconductive filler.



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